LEARNING ORGANIZATIONS AND OPERATIONAL-LEVEL LEADERSHIP

A Monograph
by
Major Jack L. Gumbert II
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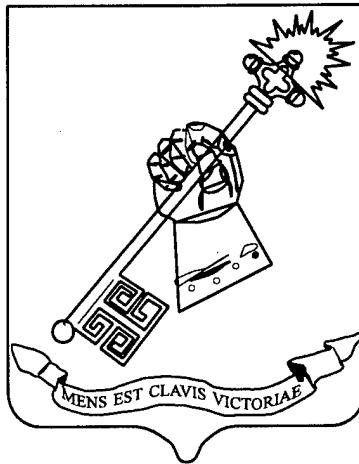
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ABSTRACT

Learning Organizations and Operational-Level Leadership by MAJ Jack L. Gumbert II, USA, 52 pages.

This monograph discusses the implications of learning organization theory on leadership, primarily at the operational level. Learning organization theory is a popular methodology for enhancing the operations of complex organizations. Of particular importance is the positive effect learning organizations have upon the members of the organization.

This monograph first examines learning organization theory. The model of learning organization theory practiced by Dr. Peter Senge provides the conceptual basis upon which to explore this theory. Next, the Army doctrinal senior-level leadership model is introduced to complete a presentation of what is presently known and available to Army leaders.

A shift in intellectual conceptualization may be necessary in order to capitalize on the benefits of learning organization theory by senior leaders. A key component of this change is the development of systems thinking. Systems thinking is a intellectual paradigm which involves understanding holistic, dynamic processes. Some of the implications of these changes are new, many are not.

The monograph theorizes operational-level leadership in Army learning organizations. Army learning organizations will have the following theoretical constructs; personal mastery, mental models, team learning and shared vision. Systems thinking provides the intellectual energy to bring these concepts to fruition.

Finally, this monograph discusses the implications these ideas have for leader development and training. Included are ideas for future learning organization leader training.

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Rapid change coupled with an ambiguous environment cloud the forecast of the future. Nowhere is this more evident than the current Army situation of downsizing while concurrently receiving and executing new, varied and often confusing missions. At the same time the change in the east-west balance of power brought a new international security environment. Now, the global threat of the past five decades is gone, replaced by unknown threats and different missions from that which the cold war army was trained to accomplish.[1] Change and uncertainty will be a constant theme well into the future. Further, in these times of shrinking budgets the mission profile of the Army is expanding. A significant effect of this situation is the requirement to accomplish more and varied missions with less resources. Army leaders must recognize, understand, adapt to, and anticipate the changing environment in order to maximize mission accomplishment at minimum cost in lives and resources.

Army military doctrine provides guidance and procedures to leaders in a series of field manuals(FMs) designed to assist and support the military leader. Due to the rapidly changing nature of the security arena, many of these manuals are presently in the process of revision. Concurrently, there is an ongoing evolution of Army leadership theory and organizational theory. This progression can be seen in the writing of many leading Army thinkers. The basic theme of these authors is that the Army must change, not just with the environment, but in anticipation of the future. Change will occur in how the Army operates and in how the Army understands itself as an organization. Like any organization, the US Army must understand change in order to prepare for the future.

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Change will effect many components within Army systems of operation. One area of change will be in the relationship between the leader, the led, and the organization. Traditional concepts of the leader-subordinate relationship may not be the most effective or desirable in the future. The Army must help shape the future by preparing leaders now who will effective leaders in the Force XXI Army of tomorrow.

Another area of change will be organizational structure and the theory that underlies operations within the organization. The structure of Army organizations is currently downsizing. Concurrently, the Army is experimenting with new organizational structures and with concepts, such as nonhierarchical command information structures.[2] These changes in Army organization will require new methods of management and new leadership styles and skills. Understanding and anticipating change will provide the intellectual bedrock upon which the Army can begin preparing leaders for the future.

One significant trend in the evolution of Army thought concerns the concept of the learning organization. In the Training and Doctrine Command (TRADOC) pamphlet 525-5, FORCE XXI OPERATIONS, the Army declares that it has recently changed itself to be a learning organization.[3] This concept has its source in civilian management theory. One of the leading theorists of learning organization theory is Peter M. Senge, the author of The Fifth Discipline, The Art and Practice of The Learning Organization. The Army has adopted many learning organization concepts in theory. Senge's writings are current organizational theory text at The School for Advanced Military Study in Fort Leavenworth, Kansas.

BACKGROUND and ASSUMPTIONS.

A basic assumption by Army leadership is that the Army knows what learning organizations are and how they operate. Further, Army leadership assumes or has decided that learning organization theory is compatible with or supplements current Army doctrine. In short, the Army has stated that it is a learning organization, but is it? The decision to declare the Army a learning organization comes without the benefit of much advanced notice. Has the Army done the prior experimentation and study to determine if becoming a learning organization is in the Army's best interest? Is it possible that the learning organization theory of management conforms to present Army leadership and social theory? Does the Army know what impact this decision has, and what if any changes in doctrine are required to conform with the theory? These questions form the background against which the research question becomes significant.

The significance of this issue is the very likely possibility that learning organization theory is incompatible with present leadership doctrine. At the very least a change in doctrine may be in order to bring doctrine in line with learning organization theory. The other possibility is the modification of learning organization theory to the specifics and needs of Army leadership doctrine. The last and least probable scenario is that current Army doctrine is in complete compliance with learning organization theory with no modifications of either required.

PURPOSE.

This monograph will research the question of what effect the adoption of learning organization theory will have on operational-level leadership.

METHODOLOGY.

This monograph will be theoretical and exploratory. There are endless theories addressing issues of future force structure, force organization and leadership. This monograph will grant as given the fact that change in the Army will continue into the immediate future and that the Army will both react to, and attempt to anticipate events. This paper will examine learning organization theory with respect to the body of thought centered around Peter Senge and his colleagues at The Center for Organizational Learning, Sloan School of Management, Massachusetts Institute of Technology. Initially, a definition of learning organization is in order.

A learning organization is an organization skilled at creating, acquiring, and transforming knowledge, and at modifying its behavior to reflect new knowledge and insights.[4]

The monograph will develop a model of learning organization theory which is consistent with currently accepted concepts outlined by Senge in his book The Fifth Discipline. Next, this paper will examine a model of operational leadership as identified in Army FM 22-103, Leadership and Command at Senior Levels. This manual will be a base from which to incorporate more recent concepts of operational-level leadership. With these two conceptual models established, analysis will focus on answering the basic research question and related supporting questions. The implications of the analysis will be to provide ideas for the direction of leader training today, in order to have prepared and capable leaders for the Force XXI Army of the future.

II. Learning Organization Theory.

TRADOC pamphlet 525-5, Force XXI Operations states:

Our Army has recently changed itself to become a learning organization better suited to the wide variety of requirements for service to nation in a much different strategic environment.[5]

Learning organization theory is the newest management and leadership philosophy espoused by much of the corporate world.[6] The leading practitioner and theorist of the learning organization philosophy is Peter Senge. The Army is working with Peter Senge to enable it to better understand itself as an organization, and in an effort to learn how to apply learning organization concepts.[7] Dr. Senge's work articulates a cornerstone position of human values at work within the organization. In 1990 Dr. Senge authored the ground-breaking book, The Fifth Discipline, The Art and Practice of The Learning Organization.[8] This seminal work was the basis for the developing theory of learning organizations. In 1991 Dr. Senge instituted the Center of Organizational Learning at the Sloan School of Management located at the Massachusetts Institute of Technology. This consortium of scholars, corporations and businesses is currently involved with the application of learning organization theory to everyday business. In 1994 key individuals from the Center of Organizational Learning together with Dr. Senge published a companion piece called, The Fifth Discipline Fieldbook.[9] This book relates the practical experience of a variety of businesses and individuals in adopting learning organization theory to everyday practice.

Together, these books represent the crux of the development of learning organization

theory currently practiced by American business. Further, Dr. Senge and the Organizational Learning Center will be at the intersection of Army plans to adopt learning organization theory into leadership practice within the service. What then is the theory of learning organizations?

LEARNING ORGANIZATIONS.

> *" Learning in organizations means the continuous testing of experience, and the transformation of that experience into knowledge--accessible to the whole organization, and relevant to its core purpose"[10]*
>
> *Peter Senge*

This theory is about learning, especially the art and practice of collective organizational learning. Learning organizations are organizations that are designed, equipped and structured to learn. They adapt, survive and grow within their environment by maximizing the capabilities of each member of the organization. Learning organizations orient on growth and success. In <u>The Fifth Discipline</u>, Dr. Senge describes a learning organization as a place," where people continually expand their capacity to create results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together". So what does a learning organization learn? How would one recognize a learning organization? How does a learning organization evolve? The answers to these questions are provided in excerpts from an article by Gene Calvert, Sandra Mobley and Lisa Marshall.[11] These individuals are leading business practicineers who work to incorporate learning organization theory into everyday practice in the corporate world.

What do learning organizations learn that other organizations do not?

Learning organizations learn:
- to use learning to reach their goals - to help people value the effects of their learning on their organizations - to avoid making the same mistakes again (and again) - to share information in ways that prompt appropriate action - to link individual performance with organizational performance - to tie rewards to key measures of performance - to take in a lot of environmental information at all times - to create structures and procedures that support the learning process - to foster ongoing and orderly dialogues - to make it safe for people to share openly and take risks

Table 1.

What does a learning organization look like?

A Learning Organization:
- learns collaboratively, openly, and across boundaries - values *how* it learns as well as *what* it learns - invests in staying ahead of the learning curve in its industry (environment) - gains a competitive edge by learning faster and smarter than competitors - turns data into useful knowledge quickly and at the right time and place - enables every member to feel that every experience provides him or her a chance to learn something potentially useful, even if only for leveraging future learning - exhibits little fear and defensiveness: rewards and learns from what goes wrong ("failure" learning) and right ("success" learning) - takes risks but avoids jeopardizing basic security of the organization - invests in experimental and seemingly tangential learning - supports people and teams who want to pursue action-learning projects - depoliticizes learning by not penalizing individuals or groups for sharing information and conclusions

Table 2.

How does a learning organization evolve?

What are the first steps to becoming a learning organization? A budding learning organization can begin by:
- questioning current assumptions about learning - getting an outside perspective - tying the goal of becoming a learning organization to its organizational vision - finding or creating a champion in top management - looking for the "pain" in the organization -- the place where more effective learning could help - articulating learning organization ideas plainly - rewarding group as well as individual learning success and failure - finding an external enemy to spur greater cooperative learning - finding ways to collaborate internally in and unhampered by boundaries

Table 3.

Dr. Senge developed the phrase "learning organization" to describe those attributes he believed were necessary for an organization to become a truly emergent, generative and adaptable organization. Senge wrote of five disciplines needed to be a learning organization: personal mastery, mental models, team learning, shared vision and systems thinking.[12] Learning organizations can only be understood within the context of systems thinking. Senge described the relationship of the first four disciplines to systems thinking in the following way.

"I call systems thinking the fifth discipline because it is the conceptual cornerstone that underlies all of the learning disciplines."[13]

SYSTEMS THINKING.

Learning organizations can only be truly understood in the context of systems thinking. This idea is not new, however; it represents a true revolution in how individuals view

cause and effect relationships. Further, it represents a unique method of understanding and analyzing the environment. Systems thinking involves establishing a new paradigm, a new world view. Systems thinking is known as the fifth discipline because it integrates the other disciplines, acting as a cornerstone, while fusing the theory into a coherent body of thought and practice.[14] Systems thinking was popularized in the 1960s by Ludwig von Bertalanffy with the publication of General Systems Theory.[15] Systems thinking involves analyzing the complete situation concerning events when determining cause and effect. The theory understands that there exists no true reductionism of cause and effect, apart from the scientific laboratory.[16] There are many types of systems: open systems, closed systems, social systems, etc.[17] A key point to understand is that systems operate within systems, with the realization that actions by one can effect the other, often in an unintended way. This in turn may effect another part of a related system. Systems thinking focuses on the relationships between the arrangements of the various systems and sub-systems that operate in the environment under analysis.[18]

Systems thinking provides the holistic, dynamic viewpoint necessary to understand today's reality and tomorrow's possibilities. It is the art of being able to recognize complex and subtle structures and of being able to see patterns that cause or create a structure.[19] Systems thinking allows comprehension of the many dynamic processes that operate together in a interrelated fashion. This comprehension provides insight into how systems operate to bring about the reality of today's perception. Systems thinking will assist in finding the high leverage changes in complex situations that will produce the greatest effect. The art is in seeing through the detail and dynamic complexity to the

underlying structures and behaviors that generate change.[20] Once a systems thinker

understands how today's realities evolved, systems thinkers have a basis to better

understand how to properly chart a path toward tomorrow.

Senge developed a fundamental set of concepts to enable understanding of the systems

thinking approach as it relates to learning organizations, these are called the laws of

systems thinking. The laws of systems thinking are defined below in Table 4.[21]

Laws of Systems Thinking	Description
Today's problems come from yesterday's "solutions".	Don't do the fix that transfers the problem to another area or time.
The harder you push, the harder the system pushes back.	Sometimes we recognize a problem and use traditional ways to overcome it. When this fails, we often keep applying more pressure rather than trying to understand why the solution isn't working.
Behavior grows better before it grows worse.	A solution feels good and at first cures the symptoms of the problem - but does it cure the problem in the long term.
The easy way out usually leads back in.	We all find comfort in applying familiar solutions to problems, but the obvious approach won't always achieve the best results.
The cure can be worse than the disease.	Avoid work on complex problems, by working on simple ones or shifting the burden.
Faster is slower.	In nature, optimal growth is usually slower than the fastest possible rate of growth.

Cause and effect are not closely related in time and space.	<u>Cause</u>: symptoms that indicate a problem. <u>Effect</u>: the interaction of the underlying system that is most responsible for generating symptoms.
Small changes can produce big results - but the areas of highest leverage are often the least obvious.	The key is to understand the structure rather than the event, and the processes of change rather than a snapshot in time.
You can have your cake and eat it too - but not at once.	You can have high quality and high profit, but it takes time to swing around customer perceptions.
Dividing an elephant in half does not produce two small elephants.	Living systems have integrity, their character depends on the whole.
There is no blame.	We are they, the cure lies with our relationship with ourselves, not blaming someone else for the cause of our problems.

Table 4.

The laws of systems thinking will help an organization discover their explicit or tacit approach to problem solving. Further, the systems perspective reveals that there may be multiple levels of explanation in any complex situation. The following diagram suggests organizations must look beneath the event they are currently reacting to and examine the structure and the patterns of behavior.

Systemic Structure (Generative)

Patterns of Behavior (Responsive)

Events (Reactive)
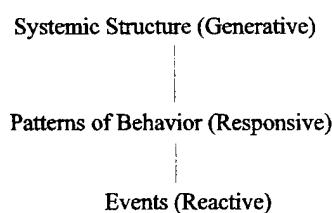
Figure 1.

Starting at the bottom, this diagram demonstrates that from a systems perspective there are multiple levels of explanation within any complex situation.[22] This diagram illustrates that understanding the events that describe a situation only allows for a reactive stance. This posture dooms the user into constantly being behind events, reacting instead of being proactive. Understanding patterns of behavior focus on understanding longer-term tendencies and assessing what they mean. The deepest level of explanation is to understand the structure underlying the patterns of behavior and events. This is the least common and potentially the most powerful analysis.[23] Systemic structure offers the explanation to why behaviors and events happen. Further, for a systems thinker it grants the opportunity to generate a structure that develops the events and patterns of behavior desired by the organization. In this sense, systems thinking is truly proactive and generative in nature.

THE CORE DISCIPLINES.

There are four core disciplines which define a learning organization. These disciplines are defined by Senge as: personal mastery, mental models, shared vision, team learning. These constructs can only be understood within the context of systems thinking. Together, these concepts can move an organization along the path of its highest learning curve, allowing it to maximize its potential for growth and learning. The first discipline discussed by Senge is the discipline of personal mastery.

Personal mastery involves deepening our personal vision, of focusing our energies and learning to expand our capacity to create the results we most desire. Personal mastery encompasses technical and tactical competence but goes beyond each. It involves two

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bottom lines. The first concept is that individuals must continually clarify what is important to them. The second is to continually learn how to see current reality clearly.[24] This leads to the defining question of where are we relative to where we want to be. The juxtaposition of vision versus reality generates a delta known as "creative tension". Chaos theory would describe the concept of creative tension as the process that allows complex, adaptive systems to create new higher orders of life. It postulates that emergent growth occurs in response to environmental clues, (events) therefore adaptive, (responsive) patterns of behavior result. Creative tension occurs on the edge of chaos, the unknown, exploratory and risky area where life borders with decay. Within this tension lies the greatest potential for creative growth.[25] Without creative tension individuals are unable to generate the creative drive and motivation to develop the potential to reach their personal goals.

The second discipline is mental models. Mental models are our internal pictures of the world. They are deeply ingrained assumption, generalizations and images that influence how we see the world and how we take action.[26] Many of these mental models are in the form of tacit knowledge in that we are unaware that they exist or affect our behavior. Senge advocates reflection and inquiry into mental models in order to understand not just what we think but how we think.

The third discipline discussed by Senge is the discipline of shared vision. Vision statements have been very popular in the management arena in the past few years. The posted vision statement is not what Senge is talking about. His concept of vision is that of a shared belief and the capacity to hold a shared picture of the future. It involves

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building a sense of commitment in a group by developing shared images of the future the group seeks to create. When there is genuine vision (as opposed to a vision statement), people excel and learn because they are motivated to do so.[27] This requires the integration of personal vision and shared vision. Senge uses the metaphor of the hologram. Holograms are three-dimensional images created by interacting light sources. Each light source is a individual image of the whole picture. No matter how the hologram is divided, each piece still shows the image of the whole.[28] In a learning organization each person brings his or her image of the whole into the shared vision of what the organization can become. Adding together all the various images of the whole does not change the image, it simple makes it more intense. What is required for shared vision is the integration of personal vision through enrollment and commitment of the individuals in the organization.[29] Shared vision is the cement that binds the individuals to each other, to the organization, and to the organizational and personal goals of the members.

The fourth discipline Senge describes is that of team learning. This discipline involves transforming conversational and collective thinking skills, so that groups of people can reliably develop the intelligence and ability which is greater than the sum of the individual members' talents.[30] This requires the members to engage in open dialogue, not just discussion, with the members of the team. Team learning requires the suspension of assumptions and the ability to think together, not at the lowest common denominator, but at the pinnacle of the teams' creative capability. Within organizations team learning has three critical dimensions.[31]

1. The ability to think insightfully about complex issues.

2. The need for innovative, coordinated action.

3. The role of team members on other related teams. This involves the collective

discipline as it is spread across the organization.

The key concept is that teams are the fundamental learning unit in modern

organizations.[32] Teams must be able to collectively learn or the whole organization will

consist of related, but not interrelated, individuals.

Lastly, it must be remembered that the four core disciplines are relevant and related

through the perspective of systems thinking. Senge described the relationship of the core

disciplines to systems thinking in the following way.

"Systems thinking also needs the disciplines of building shared vision, mental models,
team learning, and personal mastery to realize its potential."[33] Further he states, "I call
systems thinking the fifth discipline because it is the conceptual cornerstone that
underlies all of the learning disciplines."[34]

LEADERSHIP IN A LEARNING ORGANIZATION.

To be effective in an learning organization the leader must adopt a new paradigm and a

new conception of leadership. Leaders must evolve beyond traditional roles of

leadership and become designers, stewards and teachers who impart direction, purpose

and motivation.[35]

In a learning organization the leader designs the organizational structure to take

advantage of the inherent capabilities of the entire organization. This process involves

integrating the five disciplines in order to create a synergistic effect. The leader designs

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the organization in accordance with its vision, values and purpose. Thus, the organization develops direction and can accomplish any mission within a learning context. Further, the organization learns to learn while moving towards the actualization of its vision.[36] It must be remembered that visions are endstates that are never reached. Learning organizations pursue constant and consistent growth, therefore, it can never realize an endstate for to do so would be to quit growing and stagnate.

The leaders of learning organizations must be stewards. They understand the purpose of the organization and guide it toward goal accomplishment. These leaders know the deeper meaning of why the organization exists and integrate that meaning into all aspects of the leaders work. Learning organization leaders become the steward of the organization's vision and relate this purpose as a vehicle for bringing learning and change.[37]

Lastly, the leader of a learning organization should teach. Teaching individuals to learn how to learn, and empowering them with the understanding to cope with reality is the leader's responsibility. Leaders must practice and teach systems thinking. Together, when coupled with the core disciplines and secure in the organizational purpose and vision, the leader must allow individuals to grow. This includes understanding that mistakes can be learning oriented and can have a positive learning outcome. This will motivate members to learn while unleashing the creative tension needed to energize the organization.[38]

This theory and the learning organization it underlies is bound in an environment more complex than at any time in the history of mankind. Man continues to create information

that easily overwhelms the ability of any one man to manage. Complexity can undermine confidence and erode responsibility. Systems thinking is an antidote to the complexity that engulfs army leaders. It provides a holistic methodology to see and understand the environment. Further, it allows a leader to see the relationships that exist between and within the complex systems operating in dynamic fashion throughout the battlespace. Learning organizations permit the leader to overcome complexity by giving leaders a method to adapt and grow within the dynamic environment of combat. Learning organization theory can be a key to success on the battlefield of the future.

III. Army Operational-Level Leadership.

INTRODUCTION.

This chapter will examine the concept of Army leadership. Initially, a discussion of the basics of leadership will provide groundwork. Subsequently, this chapter will focus on Army operational-level leadership. Operational-level leadership is identified in Army manuals as generally existing from the command levels of brigade through corps. This is not a hard and fast rule as specific situations dictate exact definitions. Leadership above this level is known as strategic leadership.[39] Leaders within the Army operate in one of two general modes. Direct leadership applies in situations where the leader and the led have face-to-face contact. This mode is normally associated with basic, junior-level leadership. Indirect leadership occurs in larger organizations with a broad range of missions and where leadership is more complex. Senior level leaders provide vision,

influence the organization through many layers, build organizations, and create enabling conditions for junior leaders.[40] Such leadership can operate in either the direct or indirect mode or both. Operational-level leadership is therefore normally identified in manuals as senior leadership. For the purposes of this paper the terms operational-level leader and senior leader will be used interchangeably.

DEFINITIONS.

Leadership is the process, through direct or indirect means, of influencing others to accomplish the mission by providing resources, purpose, direction, and motivation and of creating the conditions for sustained organizational success. It involves the commander's ability to impart his vision...[41]

Army operational-level leadership applies this definition across the Army hierarchy of leadership. The successful operational-level leader must exercise direct and indirect (supervisory) leadership. Direct leadership is face-to-face, personal leadership where the leader is directly involved with the subordinate. Indirect leadership is normally a level removed or supervisory position where the leader is responsible for establishing the conditions for success by the entire organization. Field Manual 22-103, <u>Leadership and Command at Senior Levels</u> offers this definition of senior level leadership.

"...the art of direct and indirect influence and the skill of creating the conditions for the sustained organizational success to achieve the desired result".[42]

The important factor in these definitions of leadership is that they establish the groundwork for a model or framework of leadership.

The Army must develop capable leaders if it is to remain a viable and valuable institution. The history of the Army indicates that sound leadership was not always available. However, this same history is replete with evidence of competent and

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occasionally brilliant leadership operating at many levels of war. The experience of history provides a body of information from which to draw important lessons. Together with modern leadership and management theory, the Army has codified a doctrinal framework for leadership. This framework of doctrine is contained in a series of leadership field manuals. This paper will examine the relevant sections of several of these leadership manuals in order to determine the framework or model of leadership applicable today.

THE FOUNDATION OF GOOD LEADERSHIP.

Good leadership is defined in Army doctrine as a necessary and important component for successful Army operations. The Army specifically describes good leadership as being the most important element of combat power. Consider the following statement from the Army keystone manual FM 100-5, Operations, "The most essential dynamic of combat power is competent and confident officer and noncommissioned officer leadership. Leaders inspire soldiers with the will to win. They provide purpose, direction, and motivation in combat."[43]

Purpose is defined as giving soldiers a reason why they should difficult things under dangerous conditions. Direction is defined as giving soldiers an orientation of tasks based on leader set priorities. Motivation gives soldiers the will to give everything they can to accomplish the mission.[44] The concepts of purpose, direction and motivation will be explored to detail later in this paper.

The Army identifies the characteristics required of future Army leaders as individuals who:[45]

- Understand the human dimension of operations.

- Provide purpose, direction, and motivation to their units.

- Show initiative.

- Are technically and tactically competent.

- Are willing to exploit opportunities and take well-calculated risks within the commander's intent.

- Have an aggressive will to fight and win.

- Build cohesive teams.

- Communicate effectively, both orally and in writing.

- Are committed to the Army ethic.

This list was developed by Army leadership in response to the changing nature of warfare. Increasingly, conflict is vague and ambiguous, bringing increased demands on leaders at all levels.

The Army doctrinal guidance on basic leadership explores the key elements of leadership as factors and principles, then defines what a good leader must be, know and do. The Army identifies four factors of leadership which should affect how leaders take action and make decisions. The first factor is to understand the soldiers being led. Good leaders understand the implications of the decisions they make upon the soldiers they lead. Further, capable leadership can correctly assess the human dimension of soldiering, including things like competence, commitment, climate and trust. The second factor is

self-awareness. The leader must know his or her strengths, weaknesses, capabilities and limitations. Without an accurate self-assessment the leader cannot have a reliable point of reference from which to assess others. The third factor of leadership is the situation. The Army understands that leadership may be situational, in that there may be different styles of leadership. One style may not be appropriate for every situation. Individual leaders may exercise different styles of leadership based on specific factors present in the situation.[46] The last factor of leadership is communications. The Army recognizes the significance of effective communication. Communication is understood as a two-way street, the sender and the receiver must be able to reciprocate sending and receiving. Without effective communication, discipline and cohesion are lost.[47] Army doctrine places great reliance on the ability of leaders to recognize and understand the specifics of each situation they encounter. No two situations are exactly alike, which means that the relationships between the factors of leadership will never be the same.

The Army articulates eleven principles of leadership. These principles serve as guides to action and provide a cornerstone for officer development. The Army holds these principles as fundamental truths which are founded in history and relevant for today. Table 5 below provides the principles of leadership with a short description of each.[48]

PRINCIPLES OF LEADERSHIP	DESCRIPTION
Know yourself and seek self-improvement.	Understand your strengths/weaknesses constantly seek improvement.

Be technically and tactically proficient.	Develop a thorough proficiency in tactics, techniques and procedures.
Seek responsibility and take responsibility for your actions.	Leaders accept responsibility and act accordingly.
Make sound and timely decisions.	Understand the situation, don't delay, consider 2nd/3rd order, short/long term effects.
Set the example.	Be a role model worthy of emulation.
Know your soldiers and look out for their well being.	Knowing and caring for subordinates helps build trust and respect.
Keep your subordinates informed.	Assists soldiers in using initiative, improves teamwork, enhances morale.
Develop a sense of responsibility in your subordinates.	Promotes delegation of authority and builds trust, confidence and pride.
Ensure the task is understood, supervised and accomplished.	Sets standards, build teamwork. Get feedback to ensure task is understood.
Build the team.	Teams succeed in combat, develops cohesion and espirit.
Employ your unit in accordance with its capabilities.	Proper determination of capabilities will allow for focused training and employment.

Table 5.

Field Manual 22-100, <u>Military Leadership</u> is the keystone doctrinal leadership manual, not only because it relates what a leader should remember, but it describes what a good leader should be, know and do. This description of Army leaders is cultural and reflects a traditional American view on leadership. Founded in the beginning of American society, the Army professional leadership ethic is steeped in beliefs that are the foundation of Army culture.

The Army views individual beliefs as being assumptions or convictions a person may

hold. These beliefs may include religion, human nature, or politics, as an example. A

leader's beliefs will directly impact on the leadership climate, cohesion, discipline,

training and combat effectiveness of a unit.[49] Values are defined as attitudes about the

worth or importance of a people, concepts or things.[50] There are four essential values

that all good leaders are expected to possess: courage, candor, competence and

commitment. Beliefs and values help guide leaders in their everyday life. They are key

in determining how a leader acts and decides. Beliefs and values can be shared and

emulated by subordinates. The good leader should strive to set a healthy example which

inculcates the desired beliefs, values and attitudes in subordinates. This example helps

build character in individuals and in the unit.

Character is the demonstrated behavior of a persons values and beliefs. The Army

understands the importance of building leaders with good character. Leaders who

provide strength, inspiration and guidance motivate the unit to exceed. Building

character supports the Army professional ethic.

The Army ethic has four elements which contain the values and moral context the

Army leader must demonstrate.[51] The four elements of Army ethics are described below

in Table 6.

Four elements of professional Army ethics.	Description.
Loyalty.	Loyalty to nation, the Army, the unit. includes obligation and commitment.
Duty.	Moral obligation to do what is right.

Selfless service.	Nation and Army welfare and mission ahead of personal considerations.
Integrity.	Honest, outwardly living correct values

Table 6.

Army leaders must understand a great deal about the Army, human nature and soldiering. However, this knowledge is useless without the capability to do something worthwhile with it. The following table encapsulates much of what a good leader must know. [52]

As a Leader, You must Know.	Examples.
Know the four factors of leadership and how they affect each other.	- The leader - The led - The situation - Communications
Know standards.	- Sources of Army standards - How standards relate to warfighting
Know yourself.	- Personality and performance - Strengths and weaknesses - Knowledge, skills, and attitudes
Know human nature.	- Potential for good and bad behavior - How depression and sadness contribute to fear and panic, and how fear affects performance
Know your job.	- Plan and communicate effectively - Supervise, teach, coach, and counsel - Display technical and tactical competence - Develop subordinates - Make good decisions that your soldiers accept - Use available systems
Know your unit.	- Unit capabilities and limitations

Table 7.

Army leaders must be able to transform their knowledge into action. Effective leaders

provide their soldiers with purpose, direction and motivation, including discipline, in order to move the unit towards mission accomplishment. Table 8 summarizes some of the actions a leader must take to provide these three essential ingredients.[53]

As a Leader, You Must	Examples
Provide purpose.	- Explain the "why" of missions - Communicate your intent
Provide direction.	- Plan - Maintain standards - Set goals - Make decisions and solve problems - Supervise, evaluate, teach, coach, and counsel - Train soldiers and soldier teams
Provide motivation.	- Take care of soldiers - Serve as the ethical standard bearer - Develop cohesive soldier teams - Make soldiering meaningful - Reward performance that exceeds standards - Correct performance not meeting standards - Punish soldiers who intentionally fail to meet standards or follow orders

Table 8.

The above summary of general leadership is provided to erect a baseline of information concerning Army leadership doctrine. This summary is important because it lays the foundation for a framework of overall leadership concepts. The next section of this paper will explore senior/operational-level leadership.

OPERATIONAL LEADERSHIP.

Operational leadership is generally found at brigade through corps, and sometimes at the regional Commander in Chief (CINC) level. The operational-level or senior leader

influences the organization through a combination of direct and indirect actions. Complex situations and a multitude of tasks compound the difficulty of leading these large organizations. Further, the operational-level leader is subject to competing demands from pressures inside and outside of the organization. The complex nature of leadership at this level requires the leader to understand the operation and integration of systems. The operational-level leader will work in an environment where intangibles, ambiguity and unpredictability are the norm.[54] The successful operational-level leader must rapidly assess the situation, determine a vision appropriate for the organization in the situation, and maintain a high tolerance for uncertainty. The following passage from FM 22-103, Leadership and Command at Senior Levels sets the tone, "Leadership and command at senior levels blends vision, communication, and craft to achieve proper command effect. Without vision, leaders and commanders become mechanics."[55]

Vision is the tool that sets the senior leader apart from his direct-level subordinates. Vision is the start point for all action in the operational-level organization. Organizational vision describes the conditions the leader wants the organization to achieve. Vision establishes the focus for organizational structure and activity. Further, vision establishes a framework within which subordinates can operate with an understanding of overall intent. Vision is a operational prerequisite for success. Senior leaders form their vision based on certain attributes, perspectives and imperatives.[56]

There are three attributes which define what the senior leader is to his or her organization. Senior leaders must be standard bearers who establish the professional and ethical conditions for success. Second, the senior leader are developers who teach, train

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and coach the members of their organization. Finally, senior leaders integrate the various capabilities from outside and inside the organization to build teams which can effectively operate within the framework of the operational vision.

Capable senior leaders operate from well-developed perspectives founded on experience and knowledge. In order to be effective, senior leaders must possess three interrelated perspectives: historical, operational and organizational. The study of both general history and specifically military history helps develop a core background of knowledge from which the senior leader can make decisions and assess situations. This perspective helps provide insight and understanding essential to sound military leadership. Second, the senior leader must understand current doctrine, the operational capabilities of friendly and threat armies, and maintain constant attention to matters of operational interest. This produces operational perspective which is critical to providing knowledgeable leadership and sound decision-making. Finally, good senior leadership has a component of basic caring. Effective leaders understand and care for the individuals within their organization. This equips the leader with organizational perspective and helps build cohesion within the unit.

The effective and capable senior leader understands that his vision must contain certain imperatives to focus the actions and direction of his organization. In order to fully implement his vision for the organization the senior leader must provide purpose, direction and motivation. These imperatives are critical to providing a common understanding and reference for the members of the unit.[57]

One of the foundations of effective senior leadership is professional ethics.

Satisfactory results gained by the organization are firmly rooted in the ethical behavior of its members. The senior leader must establish the ethical role model and sustain an ethical climate conducive to trust and commitment. Without these key ingredients the organization cannot effectively pursue its goals. Army doctrine establishes the ethical responsibilities of senior leaders.[58]

First and foremost, the Army senior leader must be a role model of ethical behavior. This will influence subordinate behavior to behave ethically as well. If there is a question of ethics the senior leader should always decide the matter conservatively so as to circumvent any question of impropriety. In routine actions the senior leader should understand the message conveyed in the handling of such issues and be sensitive to the impact of decisions. The capable senior leader never allows a question of loyalty to disrupt the organization. He or she must remember that loyalty is owed to the led as well as the leader. Further, sound leaders never decide based on the easy solution as opposed to the correct solution, even if the correct solution is more difficult. The possibility of creating double standards warns against using rationalizations to support questionable decisions.

Senior leaders must consistently promote the ethical development of subordinates and the organization as a whole. They must develop and sustain an ethical climate conducive to consistent, responsible ethical behavior. To tolerate otherwise is to court disaster. The advantage of ethical organizations is that they obtain moral toughness. This includes a strength of character, confidence and trust in leadership, and a consistency of action which builds the moral high ground necessary to win in combat.

The senior leader must exercise professional skills in order to implement the operational vision and accomplish the mission. Senior leaders need a broad range of skills in order to draw upon the proper repertoire in times of peace, crisis and war. Army doctrine divides the range of applicable skills into three areas; conceptual, competencies, and communications. Conceptual skills grant the senior leader the ability to think in terms of inter-related systems, to understand complexity, and to visualize short and long term cause and effect relationships. Competencies refer to developing the leaders ability to think flexibly and build upon basic leadership skills. Communication skills are refined from individual skills developed over the life of the leader. These skills must be further honed in the course of an officers career. The senior level professional skills are listed in Table 9.[59]

PROFESSIONAL SKILLS

Conceptual	Competency	Communications
Decision making	Perspective	Interpersonal
Forecasting	Endurance	Listening
Creativity	Risk Taking	Language
Intuition	Coordination	Teaching
	Assessment	Persuasion

Table 9.

Army doctrine emphasizes four processes that senior leaders must master if they are to become effective commanders. This is relevant to the discussion of leadership in that these processes act in concert with each other, and leadership is a great part of the overall scheme. These processes are; command, control, leadership and management. The key is the leaders ability to integrate these processes in a seamless fashion in order to develop a strategy for operating the organization. The following passage from FM 22-103

highlights the relationship between these processes.[60]

"Senior leaders perform four functions to implement their vision and achieve proper
command effect. First, they communicate their intent and provide direction so that
others can understand and respond. Next, they establish the structure to focus effort.
Then they plan and organize the activities necessary to get results. Finally, they
motivate and influence to develop and sustain the organizational purpose required to
accomplish the mission.
To communicate their vision and provide direction, they exercise the command
process. The establishment of structure requires that they employ the control process.
When they plan and organize, senior leaders use the management process. Finally,
when motivating and influencing subordinates, they are leading."

Senior Army leaders are responsible for building the organizations necessary to

accomplish their vision. Army doctrine indicates that effective organizations are

adaptive, cohesive and resilient. They are adaptive in the sense that they are organized in

such a way as to create flexibility and versatility. They become cohesive when the unit

shares strong bonds of loyalty, proficiency and esprit-de-corps. The organization

becomes resilient when adaptability and cohesion combine with self-sustainment.

Adversity builds character in the unit and is not destructive. Resilient organizations

possess a highly developed ability to learn rapidly from experience.[61]

Senior leaders plan for success by understanding the components of effective

organization. These components are the structure of the organization, the leaders that

run the organization and the unit members. A key to mission accomplishment is the

development of teams. Leaders generate teams to achieve organizational success. Senior

leaders must foster these teams by setting conditions for operation. These conditions

consist of a common intent, a positive command climate, shared values and experiences,

a focus on the future and proper delegation.[62]

Leaders at all levels provide purpose, direction and motivation. These concepts take on new meaning for leadership at senior levels. Table 10 summarizes some ideas senior leaders can use in providing purpose, direction and motivation.

Purpose	Direction	Motivation
- Be yourself and have a vision. - Consider all options in making decisions and communicating intent. - Establish a positive, progressive command climate. - Understand the intent of orders and directives from higher authority. - Establish priorities and objectives. - Establish a game plan. - Develop rules for action. - Communicate "why".	- Maintain the focus on the objective and assess missions. - Eliminate wasteful requirements that do not contribute to the mission. - Be technically and tactically competent. - Promote unit stability and develop sustainment systems. - Build command, staff and subordinate teams. - Use doctrine wisely. - Focus on the future. - Train to tough but achievable standards.	- Maintain soldiers and units to fight and win. - Be involved and influence the action at the critical place and time. - Know the impact of your actions on soldiers and units. - Reward and be enthusiastic. - Stress will and winning. - Understand yourself and be the example. - Develop cohesive, winning teams. - Be a soldier of character.

Table 10.

This framework of leadership will provide a baseline of knowledge upon which to understand Army doctrine on leadership. Combined with the material on learning organizations presented in chapter 2, this paper will analyze the research questions.

IV. How Compatible is Army Leadership Doctrine with Learning Organization Theory?

INTRODUCTION.

Revisiting the assumptions made in the monograph introduction, it was postulated that Army leadership assumes that learning organization theory is compatible with or supplements current Army leadership doctrine. Chapter 4 will explore this assumption to determine if it is valid. Chapter 2 of this paper presented learning organization theory as postulated by Dr. Peter Senge. Chapter 3 described the Army doctrinal leadership model as a framework for basic and senior level leadership. This chapter will meld these descriptions into an analysis of how well current Army leadership doctrine fits the mold required of learning organizations. The analysis will examine the five disciplines of learning organizations and leadership as each relate to Army leadership doctrine.

Organizations do not simply become learning organizations overnight or by fiat. Leadership cannot declare the Army to be a learning organization, and expect it to be so without the necessary groundwork and ingredients. Further, it must be remembered that becoming a learning organization is a process. The vision of learning organization theory describes a path of learning and enhancement that dedicated members take to fulfill the goals and aspirations they have for each other, and the organization. There is no destination or endstate where becoming a learning organization is complete. The question becomes, is the groundwork and ingredients present for leadership to guide the Army along the path of a learning organization?

SYSTEMS THINKING.

The development of systems thinking is the intellectual and conceptual cornerstone to the development of a learning organization. Leaders must be able to see their environment in its totality, not just as reductionist pieces and parts. Systems thinking requires a paradigm shift in the intellectual acumen of Army leaders. Understanding the laws of systems thinking will enable the Army leader to fully appreciate his environment. Army leadership doctrine discusses the conceptual skills of decision making, forecasting, creativity and intuition. Further, Army doctrine places great emphasis on the situational factors of leadership. What Army leadership doctrine does not fully explore is the relationships between these various systems. A number of Army training documents address systems thinking as a perspective to understand.[63] For many years the Army and the Department of Defense inculcated systems theory in the practice of management.[64]

Slowly, the Army is moving in the direction of incorporating systems thinking as a conceptual paradigm. This movement is found in the increased relevance and understanding of inherently complex joint and combined operations. It is also expressed in the concepts of battle space, battlefield operating systems (functions), and an increased awareness of the human dimension of warfare.[65]

The Army has instituted an organizational structure to help it consider, experiment with, and develop systems in an integrated fashion. Battle Labs were created to provide a systems wide approach to weapons development, doctrine and issues that concern leaders of all levels. This constructive approach to learning includes a great deal of

experimentation. Much of the experimentation is done with various degrees of simulation. In many ways the Army creates its own "micro-worlds"(to use a term coined by Senge), in order to facilitate rapid learning.[66]

The operational-level leader must understand the many complex pieces of detailed information, collectively known as detailed complexity. In order to place this barrage of information in a collective whole that makes sense, the leader must analyze the systems operating on the battlefield. This holistic analysis of cause and event, detailed complexity and the proper relationships between them allow the leader to better anticipate requirements and maintain initiative. The battlefield operating systems provide a methodology for the leader to analyze the mission, the soldiers and the situation. When analyzed within the context of systems thinking, the leader has a better grasp of the dynamic nature of battle. Further, systems thinking provides the senior leader a method of comparing today with tomorrow, with a sense of what the path between the two will look like. The insights and intuitive comprehension possible with systems thinking provides the military leader with a tool which enables the leader to be proactive and anticipate events. This capability creates an atmosphere where leaders can take advantage of creating and maintaining initiative, while concurrently operating at a tempo unmatched by any adversary.

However, the conceptual framework of systems thinking has not percolated into leadership doctrine to the extent necessary to fully enable a learning organization. Operational leaders would benefit from developing an understanding of how the laws of systems thinking operate. A thorough systems perspective will allow for enlightened

decision making. This is key when leaders focus on creating generative learning as well as exercising adaptive coping with the environment or situation. Developing a shared vision with the organization depends on the ability to understand systematic structures and underlying patterns of behavior, skills which develop with systems thinking. Systems thinking provides the basis for integrating the doctrinal principles, ethics and skills required of senior leadership. Further, systems thinking will facilitate the growth and evolution of senior leadership by providing the intellectual acumen necessary to provide purpose, direction and motivation to soldiers and their organizations.

PERSONAL MASTERY.

The Army has a solid tradition of developing leaders who are tactically, technically and procedurally proficient. In the Army concept of Force XXI, the technical requirements to achieve competency will increase in proportion to increases in detail complexity. This challenging environment will include new missions at a higher tempo, all of which serves to add to the dynamic complexity which engulfs Army operations. Current doctrine requires Army senior leaders to develop along three related courses. Army leaders develop from a combination of institutional training, operational assignments and self-development.[67] This process provides the leader the capability to apply knowledge. This is an important framework in terms of learning organization theory. However it is not sufficient, there must be a more systematic synthesis to organizational learning.

Personal mastery is a process of continually expanding the leaders ability to learn and grow. It is the basis for personal motivation with the purpose of improvement. Army doctrine closely aligns with this concept. Table 10 in the previous chapter 3, provides a

synopsis of ideas senior leaders can use to provide personal and unit purpose, direction

and motivation. Concepts such as, understand yourself, and have a vision, are directed

inwardly at the senior leader. The Army desires leaders who will quest for continual

learning, both for themselves and their organizations. This is part of the self-discipline

ingrained in leaders from the basic-level of leadership to the operational-level.

The Army has developed behavioral structures which support personal mastery. The

first and possibly most important is the after action review (AAR). This process begins

at the end of each significant training exercise in the Army today. The AAR gathers all

participants to each exercise in order to establish: what happened, what was supposed to

happen, what should have happened, who did what, when and why. This process of self-

examination has deep learning value for the Army. It develops the Army's ability to learn

and adapt, while concurrently ingraining the concept that continual learning is beneficial

and expected. The organizational structure of the AAR is exactly the type of process

expected in a learning organization. In sum, the Army appears to be moving along a path

coherent with learning organization theory in the discipline of personal mastery.

The Army believes in learning from history. History provides a source of lessons

learned and historical examples from which the Army leader can generalize ideas on

leadership. The principles of leadership summarized previously in Table 5, chapter 3

provide a good example of generalized leadership concepts extrapolated from history.

Historical examples provide a framework from which the leader can operate to tackle his

current problem or assess the situation. These principles serve to buttress the values and

traditions which operate to cement the organization to its leadership. Professional

development in the form of staff rides, historical vignettes and historical self-study all facilitate the development of personal mastery and also help create the topic of the next section, mental models.

MENTAL MODELS.

Leaders at all levels have deeply ingrained mental models. These internal constructs affect how leaders view and interact with the environment. Senior leaders must develop elaborate mental models in order to equip themselves with the mental tools necessary to cope with complex, dynamic, ambiguous situations. As leaders experience and learn within a particular knowledge domain they develop complex mental models to organize, store and use large amounts of data.[68] These individuals become experts in their field. Further, many expert senior leaders develop an ability to monitor their own thinking processes. This quality is known as metacognition.[69] Army senior leaders must develop an awareness of how their thought processes operate, and of how to develop the mental models of their subordinates.

Army doctrine discusses the use of intuition by leaders. Leadership and particularly command offer many opportunities where intuition can be creatively applied. This is often referred to as the "art" of leadership or command. Army senior leaders who understand their mental models and those of their subordinates will be better positioned to fully exercise the "art" component of leadership because they will have better information. This will allow leaders to provide direction for the organization.

Mental models also provide a common frame of reference from which subordinates and senior leaders can operate with mutual understanding. A key point is that mutually

held mental models facilitate communication even where no physical communication can exist. This is akin to the old saying that two people are operating on the same sheet of music. The ability to provide positive communication through shared mental models is a key aspect of providing and understanding commander's intent.

The Army develops individual mental models through the leader development process. The Army builds mental models in accordance with its rich traditions, values and beliefs. This lays the foundation for further intellectual growth. Leaders develop shared mental models through the shared experiences of the organization. The Army has long valued tough, realistic training as a foundation for developing capable units. This concept has the added value of incorporating shared mental models throughout the organization. The shared mental models increase the ability of unit members to know, anticipate and relate to unit leaders. Therefore, operating under mission orders, the unit team can execute a plan in consonance with the intent of the leader. The Army is very capable of developing and sharing mental models which provide the organization the ability to learn.

TEAM LEARNING.

Leaders must set the conditions for the generative growth of the organization and its members by exercising team learning. The Army consists of a system of teams, bound together by organization, mission or situation. Leaders at all levels strive to create conditions which motivate the organization to excel. How does the senior leader set the conditions for creative team learning and generative growth of the organization, while providing purpose, direction and motivation?

The effective senior leader must establish a climate of trust and confidence. Trust and

confidence is initially built through the inter-personal contact and communication between leaders and subordinates.[70] The leader as commander must permeate his will throughout the organization.[71] Tough, realistic training helps develop the base upon which trust and confidence rests. After combat is joined, trust is maintained or elevated through mutually shared experiences. However, trust is eroded in situations where the leader is determined by subordinates to be uncaring, unworthy of trust or incompetent. Senior leaders must establish and maintain the conditions conducive to team learning.

Senior leaders must empower their subordinates. Information must flow laterally and horizontally through out the organization. Senge discusses two types of communication, discussion and dialogue. Discussion occurs when the subject is scrutinized from various points of view, with one or more positions determined to be correct or superior. Dialogue occurs when the participants collectively work to access a larger meaning, providing a free flow of ideas and a greater capacity to learn.[72] Soldiers understand there are many occasions when discussion must take place. Soldiers also know that occasionally purely one way conversations will occur, predicated on the situation or in an emergency. However, there is a time and place for dialogue within the Army. The establishment of a goal or vision, coupled with a firm understanding of the situation generates a creative tension which vitalizes the organization to learn. When analyzing a problem or confronted with a situation the leader must trust in his subordinates to help devise a solution. Then, the effective senior leader should assist the subordinate in execution of the plan. Soldiers who are so empowered, and who believe they are an intregal part of the organization, have a vested interest in the shared outcome. Further,

empowering subordinates increases their desire and capability to learn.

Army doctrine adheres to the concept of mission-oriented orders and decentralized execution of centrally planned operations.[73] This doctrine supports the learning organization practice of team learning. Decentralized execution depends upon cohesive, effective teams operating within the intent of the higher leader. Mission-oriented orders depend upon shared understanding and the empowerment of subordinates in the organization. Together, these concepts provide the foundation in doctrine for team learning.

Senior leaders should allow maximum freedom of action for subordinates to accomplish their missions. Leaders should not pre-empt the command or leadership prerogatives of subordinates, unless absolutely necessary. Further, over-supervision of subordinates can destroy trust and damage the learning climate. This development is known as micro-management and is closely tied to a fear of failure on the part of the leader. Micro-management can have a negative affect on the motivation of the organization and its desire to learn. Army doctrine is opposed the these ideas.

Another idea which is anathema to developing team learning is punishment for honest or trivial mistakes. Intolerance of even small mistakes or punishment of anything not deemed perfect is known in the Army as, "the zero defect mentality". This process is destructive to team learning because it stifles initiative, reduces risk-taking and over stresses perfection at the cost of learning.[74] The "zero defect mentality" must be rooted out of the Army collective thought process if true team learning is to flourish.

The Army has developed structures which support team learning. One development

which supports team learning is the AAR process mentioned earlier. The shared, in-depth feedback which accompanies this process is tremendously beneficial as a learning tool. During AARs each team member contributes to the session. All individual views are important and necessary to fully explore the group learning potential. This is not just "group think" but a genuine learning advance for every individual in the organization. Another organization which supports team learning is The Center for Army Lessons Learned (CALL). CALL works to spread information from one system or organization within the Army, to all the other systems and organizations. Several Joint Task Force (JTF) Commanders have reviewed the CALL library before embarking on their operations. This information sharing process is vital to integrating shared lessons across the organization. Horizontal and vertical information sharing is an important component of team learning.

In sum, the Army has laid the ground work for successful organizational team learning. Army doctrine supports the existence and fosters the development of team learning across the organization. However, micro-management and "the zero defect mentality" tend to thwart the team learning. Both of these conditions should be eliminated from Army behavior patterns if the organization is to take full advantage of the tremendous learning resources at its disposal.

SHARED VISION.

Shared vision is a creative process that provides focus and energy for organizational learning. Shared vision seeks to answer the question "what does the organization want to create?"[75] Vision is the glue that binds the members of the organization to each other, to

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the organization, and to their respective goals. Shared vision is essential in that vision provides the organizational target, or conceptual benchmark the Army strives to reach. The utility of shared vision for the senior leader is to provide a pathway towards a goal for leading the Army into the next century. Vision for the operational leader as commander means developing a proper endstate, and understanding the nature and purpose of the operation. The result is a sense of unifying purpose for the organization and a sense of direction for its members. The Army understands how important it is to provide vision for the organization.

The Army has a vision of its future. The vision is called Force XXI.[76] Force XXI is a power projection Army equipped and manned to fight and win warfare, or conflict less than war, through the next century. Army senior leaders build shared vision within the organization through experiments and training exercises. The Louisiana Maneuvers are a methodology for incorporating the vision of the future Army with concepts and experiments to help the Army in its journey. The Battle Labs experiment to create the technical, organizational and procedural systems which will allow the Army to reach its vision. Together, these processes operate to incorporate change within the organizational vision. They help propel the Army down the path toward its vision of what the Army wants to become, Force XXI. Army senior leadership must work to keep developing the shared vision in order to maintain Army direction on this journey.

V. Conclusion.

Systems thinking is the key concept underlying learning organization theory. Army senior leadership must become well versed in the characteristics, abilities and laws of systems thinking. The Army does practice many of the basic concepts of systems thinking. However, Army senior leadership must fully embrace the holistic nature of systems thinking in order to maximize the capabilities of becoming a learning organization. The generative, creative learning process that accompanies systems thinking is too valuable not to grasp completely.

Army senior leaders must be the designers, stewards and teachers of their organizations. These talents will enable their learning organizations to creatively proceed along the pathway developed by shared vision. Senior leaders design and structure organizations to accomplish missions within the given environment, and within the higher commander's intent. Senior leaders guide the organization operating as a steward, not always demanding, but often suggesting, possible courses of action. Army senior leaders lend their experience and knowledge to subordinates, becoming teachers, mentors and coaches to their subordinates. In these ways the Army traditional ethos of leadership is very akin to learning organization theory of good leadership.

The Army must create a learning organization culture within which subordinate organizations can practice learning organization concepts. Senior leaders must facilitate the learning organization process by establishing the foundation and framework of a learning organization. They do this by laying the groundwork for organizational learning through the encouragement and use of the five disciplines. The five disciplines can

operate within the traditional framework of Army values, ethics and traditions. This is a solid basis upon which to create the culture of a learning organization. The senior leader must endeavor to facilitate the Army culture as one of continual learning set within the established ethos and traditions of the professional Army. By combining the concepts of learning organization theory with the established doctrine of military leadership the Army will create an organization conceptually, and theoretically prepared to tackle the uncertain future which lies ahead. Further, the Army will be an institution which can accept ambiguity and change, while concurrently adapting, growing and developing. Army senior leadership has a theoretical model for incorporating change and growth as a component of everyday operations. Learning to continually learn will be the conceptual cornerstone of senior leadership as the organization known as the Army moves into the 21st century.

Endnotes

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21. George Getzy, first term SAMS monograph. This table is contained in his description of systems thinking.

22. Dr. Peter M. Senge, <u>The Fifth Discipline</u>, p. 52.

23. Ibid. p. 53.

24. Ibid. p. 141.

25. M. Mitchell Waldrop, <u>Complexity, The Emerging Science at the Edge of Order and Chaos</u>, (New York, New York, Simon and Schuster, 1992). This book is considered by many to be the definitive statement on complexity/chaos theory. I develop this argument at the expense of reducing much of the body of this theory to a few sentences. The link between complexity/chaos theory and many of the concepts of learning organization theory is clear in that the concept of creative tension is intregal to both theories.

26. Michael Kirby, A715 Learning in Organizations, Book Outline of The Fifth Discipline, (Command and General Staff College, Fort Leavenworth, Kansas, 1994). p. 2.

27. Ibid. p. 2.

28. Senge, <u>The Fifth Discipline</u>, p. 212.

29. Ibid. p. 218.

30. Peter M. Senge, <u>The Fifth Discipline Fieldbook, Strategies and Tools for Building a Learning Organization</u>, (New York, New York, Doubleday Publishing. 1994), p. 6.

31. Senge, <u>The Fifth Discipline</u>, p. 236.

32. Michael Kirby, p. 3.

33. Senge, <u>The Fifth Discipline</u>, p. 12.

34. Ibid. p. 69.

35. Ibid. p. 340.

36. Ibid. pp. 341-345.

37. Ibid. pp. 345-352.

38. Ibid. pp. 353-358.

39. Army Command, Leadership, and Management: Theory and Practice, United States Army War College, Carlisle Barracks, Pennsylvania, 30 June 1994. p. 5-3.

40. United States Army Field Manual FM 22-100, Military Leadership, Washington DC, Headquarters, Department of the Army, 31 July 1990. p. viii.

41. United States Army Field Manual FM 22-102, Command (initial draft), Washington DC, Headquarters, Department of the Army, 28 June 1995. p. 1-4.

42. United States Army Field Manual FM 22-103, Leadership and Command at Senior Levels, Washington DC, Headquarters, Department of the Army, 21 June 1987. p. 3.

43. United States Army Field Manual FM 100-5, Operations, Washington DC, Headquarters, Department of the Army, 14 June 1993. p. 2-11.

44. FM 22-100, Military Leadership, p. 1.

45. Ibid p. vi.

46. FM 22-100, Appendix B discusses styles of leadership in some detail. Further, situational leadership is within the curriculum of many Army schools. At Fort Leavenworth situational leadership is a core requirement taught by The Center foe Army Leadership. Important material includes, Organizational Leadership for Executives, Organizations as Systems, US Army Command and General Staff College Press, Fort Leavenworth, KS, 1994. Situational Leadership II, The Article, Kenneth H. Blanchard, Blanchard Training and Development, Inc. Escondido CA, 1985.

47. FM 22-100, pp. 3-5.

48. Ibid pp. 5-7.

49. Ibid p. 23.

50. Ibid p. 23.

51. Ibid pp. 29-34.

52. Table 7 is taken verbatim from FM 22-100, chapter 5, page 44.

53. Table 8 is taken verbatim from FM 22-100 chapter 6, page 51.

54. Army Command, Leadership, and Management: Theory and Practice. See chapter 5 for a good analysis on the levels of leadership and the differences between them.

55. FM 22-103, p 3.

56. Ibid, p. 9.

57. Ibid, see chapter 2, Leadership vision.

58. Ibid, see chapter 3, Professional ethics.

59. FM 22-103, p. 27.

60. Ibid, p. 45.

61. Ibid, p. 50.

62. Ibid, see chapter 6, The organization.

63. See Army Command, Leadership, and Management: Theory and Practice, US Army War College. ch. 3 and ch. 5. Also see Organizational Leadership for Executives, Organizations as Systems, US Army Command and General Staff College Press, Fort Leavenworth, KS, 1994.

64. Ibid. p. 3-1 through p. 3-11.

65. For an example of how Army operations are changing in scope, complexity and inter-relatedness see FM 100-5, Operations chapters 1,2 and 6.

66. Senge, The Fifth Discipline, ch. 17.

67. Department of the Army Pamphlet 350-58, Leader Development for America's Army, Headquarters, Department of the Army, Washington DC, 13 October 1994.

68. Army Research Institute, The Human Dimensions of Battle Command: A Behavior Science Perspective on the Art of Battle Command. ARI Battle Command Research Unit, Fort Leavenworth, KS. pp. 14-15.

69. Ibid. p.16.

70. This subject has been the focus of much debate and many books. See Marshall, Men Against Fire. and Van Creveld, Command in War, among many others to include FM 100-5 and FM 22-100.

71. Battle Command Battle Laboratory, <u>Battle Command</u>, (draft 2.1), Fort Leavenworth, KS. 22 April 1994. p. 11.

72. Senge, <u>The Fifth Discipline</u>, pp. 238-248.

73. FM 100-5 p. 6-6. FM 22-100 Introduction.

74. An interesting article chronicling the existence of "the zero defect mentality" titled,"You Will Not Fail", appeared in, <u>The Army Times</u>, 12 February 1996, p. 12-14.

75. Senge, <u>The Fifth Discipline</u>, p. 206.

76. The Army vision of Force XXI is contained in a pamphlet titled, <u>Force XXI, America's Army of the 21st Century</u>, Office of the Chief of Staff, Army. Director Louisiana Maneuvers, Fort Monroe, VA. 15 January 1995.

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